

### AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1 1. (Currently Amended) A method for publication and discovery of e-services provided by  
2 service provider organizations, the method executable in a system having associated with a client  
3 organization[[,]] and that includes a discovery agent[[,]] and a client agent, ~~and one or more~~  
4 ~~service provider organizations that provide e-services, the method comprising the steps of:~~

5 a) ~~the service provider organizations publishing at least one e-service description in~~  
6 ~~a predetermined format;~~

7 b) ~~the client organization~~ employing, by the system, [[a]] the discovery agent to find  
8 one or more prospective e-services based on one or more search parameters, wherein e-services  
9 are published by corresponding service provider organizations in respective e-service  
10 descriptions, and wherein finding the one or more prospective e-services comprises matching the  
11 one or more search parameters with the published e-service descriptions; and

12 e) ~~the discovery agent providing prospective services that satisfy the search~~  
13 ~~parameters; and~~

14 d) ~~the client organization~~ utilizing, by the system, the client agent to  
15 programmatically connect to the one or more prospective services e-services by employing a  
16 protocol that is compatible with supported by the one or more service provider organizations  
17 providing the one or more prospective e-services.

1 2. (Cancelled)

1 3. (Currently Amended) The method of claim [[2]] 1, further comprising accessing the  
2 e-service descriptions published at websites wherein the predetermined location is the website of  
3 [[the]] corresponding service provider organization organizations.

1 4. (Currently Amended) The method of claim 1 wherein the one or more search parameters  
2 includes include a description of ~~the service~~ an e-service by at least one of keywords, category,  
3 logical forms and expressions.

1 5. (Currently Amended) The method of claim 1 wherein employing the protocol includes  
2 employing a communication protocol and an invocation protocol.

1 6. (Currently Amended) The method of claim 1 wherein employing the protocol includes  
2 employing one of HyperText Transfer Protocol (HTTP), File Transfer Protocol (FTP), and  
3 Microsoft Message Queue Server (MSMQ).

1 7. (Currently Amended) The method of claim 1 wherein ~~the predetermined format includes~~  
2 matching the one or more search parameters with the published e-service descriptions comprises  
3 matching the one or more search parameters with the published e-service descriptions contained  
4 in an e-service data sheet.

1 8. (Currently Amended) The method of claim 1 wherein ~~the e-service description is a~~  
2 matching the one or more search parameters with the published e-service descriptions comprises  
3 matching the one or more search parameters with the published e-service descriptions contained  
4 in mark-up language document documents.

1 9. (Currently Amended) The method of claim 1 wherein ~~the e-service description is an~~  
2 matching the one or more search parameters with the published e-service descriptions comprises  
3 matching the one or more search parameters with the published e-service descriptions contained  
4 in XML document documents.

1 10. (Currently Amended) The method of claim 7 wherein ~~[[the]] each e-service description~~  
2 data sheet includes ~~one of~~ a service description, input schema name, output schema name, and  
3 protocols-supported field.

1 11. (Currently Amended) A ~~system for~~ computer associated with a client organization, the  
2 computer comprising:

3 a) ~~a client organization that provides at least one search parameter for an electronic~~  
4 service;

5 b) ~~at least one service provider organization for publishing an e-service description~~  
6 in a predetermined format; and

7 a processor; and

8 ~~[[c)]] a discovery agent for use by the client organization; wherein the discovery agent~~  
9 receives the executable on the processor to:

10 receive one or more search parameter and provides at least one e-service that  
11 matches the search parameter parameters;

12 access e-service descriptions published at web servers of corresponding service  
13 providers, wherein the e-service descriptions describe respective Internet-based commercial  
14 services provided by corresponding service providers;

15 match the received one or more search parameters with the e-service descriptions  
16 to identify one or more e-services satisfying the one or more search parameters; and

17 a client agent executable on the processor to connect to one or more web servers of  
18 corresponding one or more service providers that provide the identified one or more e-services.

1 12. (Cancelled)

1 13. (Currently Amended) The ~~system~~ computer of claim 11 wherein the discovery agent and  
2 the client agent are disposed in a system of one of the service provider organizations providers.

1 14. (Currently Amended) The ~~system~~ computer of claim 11, comprising a server containing  
2 wherein the discovery agent and the client agent, wherein the server is [[are]] disposed in a  
3 location that is remote from the client organization.

1 15. (Currently Amended) The ~~system~~ computer of claim 11 wherein the discovery agent  
2 includes  
3 a match unit for receiving the one or more search parameters and ~~one or more~~ the  
4 e-service descriptions, and based thereon for generating a first list of prospective services that  
5 meet the one or more search parameters;  
6 a semantic search unit for receiving the one or more search parameters and ~~one or more~~  
7 the e-service descriptions, and based thereon for generating a second list of prospective services  
8 that meet the one or more search parameters; and  
9 a search result generator coupled to the match unit and semantic search unit for receiving  
10 the first list of prospective services and the second list of prospective services and based thereon  
11 for generating a final list of prospective services.

1 16. (Currently Amended) The ~~system~~ computer of claim 15 wherein the match unit includes  
2 ~~one of clean logic, fuzzy logic, and a combination thereof.~~

1 17. (Cancelled)

1 18. (Currently Amended) The ~~system~~ computer of claim 11 wherein ~~[[the]]~~ each e-service  
2 description is a mark-up language document.

1 19. (Currently Amended) The ~~system~~ computer of claim 18 wherein ~~[[the]]~~ each e-service  
2 description is an XML document.

1 20. (Currently Amended) The ~~system~~ computer of claim 11 wherein ~~[[the]]~~ each e-service  
2 description includes one of a service description, input schema name, output schema name, and  
3 protocols-supported field.

1 21. (New) The method of claim 1, wherein matching the one or more search parameters with  
2 the published e-service descriptions comprises matching the one or more search parameters that  
3 contain at least price and quantity parameters.

1 22. (New) The method of claim 1, wherein matching the one or more search parameters with  
2 the published e-service descriptions comprises matching the one or more search parameters with  
3 the published e-service descriptions that describe Internet-delivered commercial services.

1 23. (New) The method of claim 1, wherein matching the one or more search parameters to  
2 the published e-service descriptions comprises matching the one or more search parameters using  
3 fuzzy matching logic in the discovery agent.

1 24. (New) The method of claim 1, wherein matching the one or more search parameters to  
2 the published e-service descriptions comprises matching the one or more search parameters by  
3 selectively using one of fuzzy matching logic and clean matching logic in the discovery agent,  
4 wherein the clean matching logic determines with certainty whether a match has occurred, and  
5 the fuzzy matching logic determines a probability of whether a match has occurred.

1 25. (New) The method of claim 1, wherein the system associated with the client organization  
2 and that includes the discovery agent and the client agent comprises a server that is remote from  
3 the client organization.

1 26. (New) The method of claim 1, further comprising receiving the one or more search  
2 parameters in a predetermined form having plural fields that are filled by a user.

1 27. (New) The computer of claim 11, wherein the one or more search parameters received  
2 by the discovery agent comprise at least price and quantity parameters.

1 28. (New) The computer of claim 11, wherein the e-service descriptions comprise e-service  
2 data sheets published by respective service providers.